

Screen printed coated PbO₂ electrode for redox flow battery

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Nano structured materials are the hot topic in the modern research because of particles sizes and highly porous and relative to large surface area. The vast application of lead dioxide electrode in the Lead acid system and electrochemical degradation is being study. Whereas nano structured lead dioxide material is prepared by electrochemical method, dip coating and thermal oxidation method. But here we discussed about the nano structured PbO₂ is synthesized by the reduction followed by oxidation of lead precursor by sodium hypochlorite at optimum temperature. The prepared nano PbO₂ is fabricated by the screen printing technology on titanium electrode and is characterized by the XRD, SEM and TEM, electrode acceleration test, I-V test. The prepared electrode will be application to redox flow battery system.